

- 13 -

WHAT IS CLAIMED IS:

1. A wireless keyboard for use with a handheld computer wherein said handheld computer comprises a wireless communications port, said wireless keyboard
5 comprising a keyboard body having a plurality of keys, a wireless communications port, battery means, and means for supporting said handheld computer in a position whereby said wireless communication ports of the keyboard and handheld computer are able to communicate with one another.
- 10 2. The wireless keyboard of claim 1 wherein said wireless communication ports are infra-red communications ports.
3. The wireless keyboard of claim 1 wherein said wireless communication ports are radio frequency communications ports.
15
4. The wireless keyboard of claim 2 wherein said means for supporting comprises a stand on which said handheld computer can be removably mounted, and means for reflecting an infrared signal from said infra-red communications port on said keyboard to said infra-red communications port on said handheld computer.
20
5. The wireless keyboard of claim 1 wherein said means for supporting comprises a hinge adapted to be removably and pivotally attached along one side thereof to said keyboard body and adapted to be removably and pivotally attached along the opposite side thereof to said handheld computer.
25
6. The wireless keyboard of claim 5 wherein said handheld computer is supported relative to said keyboard in an orientation rotated 90 degrees to its normal operating orientation.

- 14 -

7. The wireless keyboard of claim 6 wherein said means for supporting comprises a leg adapted to be removably attached at one end thereof to said handheld computer.

5 8. The wireless keyboard of claim 7 wherein said handheld computer comprises a stylus storage compartment and said leg is adapted to be stored in said stylus storage compartment.

10 9. The wireless keyboard of claim 1 wherein said keyboard comprises a plurality of keys generally corresponding to the keys of a standard keyboard comprising three parallel, lengthwise rows of keys forming a central row, an upper row and a lower row, and comprising two halves hingedly connected along a fold line extending transversely across said keyboard, each half thereby comprising a portion of said plurality of keys, whereby said keyboard is folded from a first open position in
15 which said plurality of keys forms said generally standard personal computer keyboard, to a closed position in which said two halves are in opposed parallel relationship and wherein said central row comprises keys of standard size, and said upper and lower rows comprise keys which are reduced in size in the transverse direction.

20

10. The wireless keyboard of claim 9 wherein said reduced size keys comprise keys which have upstanding edges along the top and bottom edges thereof respectively which are raised above the upper surface of said central row.

25 11. The wireless keyboard of claim 10 wherein said reduced size keys comprise keys which have a curved upper surface.

12. The wireless keyboard of claim 10 wherein said reduced size keys comprise keys which have a uniformly sloping upper surface.

- 15 -

13. The wireless keyboard of claim 10 wherein said reduced size keys comprise keys which have an upper surface which forms an angle less than 180 degrees with the plane of said central row.

5 14. The wireless keyboard of claim 10 wherein said reduced size keys comprise keys which have upper horizontal surface portions which are raised above said central row.

10 15. The wireless keyboard of claim 9 further comprising hinge means for hingedly attaching a handheld computer.

15 16. The wireless keyboard of claim 15 further comprising means for supporting a handheld computer when said handheld computer is attached to said folding keyboard.

17. The wireless keyboard of claim 9 wherein said reduced size keys comprise keys which are configured to redirect a finger of a typist to the surface of the key.

20 18. The wireless keyboard of claim 9 wherein said reduced size keys comprise keys which have an upper surface a portion of which slopes upwardly away from said center row.

25 19. The wireless keyboard of claim 9 comprising two keys on opposing halves which comprise complementary uneven upper surfaces which mesh when folded to provide a higher effective upper surface when unfolded and a reduced thickness when folded.

- 16 -

20. The wireless keyboard of claim 9 wherein said means for supporting a handheld computer when said handheld computer is attached to said folding keyboard comprises a stylus-shaped element having a first end sized to fit in a stylus-receiving cavity of a handheld computer, and a rigid elongated element pivotally connected thereto.

21. A folding keyboard comprising a plurality of keys generally corresponding to the keys of a standard personal computer keyboard comprising three parallel, lengthwise rows of keys forming a central row, an upper row and a lower row, and comprising two halves hingedly connected along a fold line extending transversely across said keyboard, each half thereby comprising a portion of said plurality of keys, whereby said keyboard is folded from a first open position in which said plurality of keys forms said generally standard personal computer keyboard, to a closed position in which said two halves are in opposed parallel relationship and wherein said central row comprises keys of standard size, and said upper and lower rows comprise keys which are reduced in size in the transverse direction.

22. The folding keyboard of claim 21 wherein said reduced size keys comprise keys which are less than 75 % of the standard dimension in the transverse dimension.

23. The folding keyboard of claim 21 wherein said reduced size keys comprise keys which are less than 50 % of the standard dimension in the transverse dimension.

24. The folding keyboard of claim 21 wherein said reduced size keys comprise keys which have upstanding edges along the top and bottom edges thereof respectively which are raised above the upper surface of said central row.

- 17 -

25. The folding keyboard of claim 24 wherein said reduced size keys comprise keys which have a curved upper surface.

5 26. The folding keyboard of claim 24 wherein said reduced size keys comprise keys which have a uniformly sloping upper surface.

10 27. The folding keyboard of claim 24 wherein said reduced size keys comprise keys which have an upper surface which forms an angle less than 180 degrees with the plane of said central row.

28. The folding keyboard of claim 24 wherein said reduced size keys comprise keys which have upper horizontal surface portions which are raised above said central row.

15 29. The folding keyboard of claim 24 further comprising infrared means for communicating with a handheld computer.

20 30. The folding keyboard of claim 21 further comprising hinge means for hingedly attaching a handheld computer.

31. The folding keyboard of claim 30 further comprising means for supporting a handheld computer when said handheld computer is attached to said folding keyboard.

25 32. The folding keyboard of claim 21 wherein said reduced size keys comprise keys which are configured to redirect a finger of a typist to the surface of the key.

- 18 -

33. The folding keyboard of claim 21 wherein said reduced size keys comprise keys which have an upper surface a portion of which slopes upwardly away from said center row.

5 34. The folding keyboard of claim 21 wherein said reduced size keys comprise keys which comprise a horizontal surface hingedly connected to a vertically extending hinged tab.

10 35. The folding keyboard of claim 21 wherein said means for supporting a handheld computer when said handheld computer is attached to said folding keyboard comprises a stylus-shaped element having a first end sized to fit in a stylus-receiving cavity of a handheld computer, and a rigid elongated element pivotally connected thereto.

15 36. The folding keyboard of claim 21 comprising two keys on opposing halves which comprise complementary uneven upper surfaces which mesh when folded to provide a higher effective upper surface when unfolded and a reduced thickness when folded.

20 37. The folding keyboard of claim 21 for use with a handheld computer wherein said handheld computer comprises a wireless communications port, said folding keyboard comprising a keyboard body having a plurality of keys, a wireless communications port, battery means, and means for supporting said handheld computer in a position whereby said wireless communication ports of the keyboard
25 and handheld are able to communicate with one another.

38. The folding keyboard of claim 37 wherein said wireless communication ports are infra-red communications ports.

- 19 -

39. The folding keyboard of claim 37 wherein said wireless communication ports are radio frequency communications ports.

5 40. The folding keyboard of claim 38 wherein said means for supporting comprises a stand on which said handheld computer can be removably mounted, and means for reflecting an infrared signal from said infra-red communications port on said keyboard to said infra-red communications port on said handheld computer.

10 41. The folding keyboard of claim 37 wherein said means for supporting comprises a hinge adapted to be removably and pivotally attached along one side thereof to said keyboard body and adapted to be removably and pivotally attached along the opposite side thereof to said handheld computer.

15 42. The folding keyboard of claim 41 wherein said handheld computer is supported relative to said keyboard in an orientation rotated 90 degrees to its normal operating orientation.

20 43. The folding keyboard of claim 42 wherein said means for supporting comprises a leg adapted to be removably attached at one end thereof to said handheld computer.

25 44. The folding keyboard of claim 43 wherein said handheld computer comprises a stylus storage compartment and said leg is adapted to be stored in said stylus storage compartment.

45. In combination, a hand-held computer, and a wireless folding keyboard, wherein said handheld computer comprises a wireless communications port, said wireless keyboard comprising a keyboard body having a plurality of keys, a wireless communications port and means for supporting said handheld computer in a

- 20 -

position whereby said wireless communication ports of the keyboard and handheld are able to communicate with one another.

46. A wireless folding keyboard, wherein said handheld computer
5 comprises a wireless communications port, said wireless keyboard comprising a
keyboard body having a plurality of keys, a wireless communications port and means
for supporting said handheld computer in a position whereby said wireless
communication ports of the keyboard and handheld computer are able to
communicate with one another.

10

47. The wireless keyboard of claim 5 wherein said means for supporting
comprises removable means for attachment to said handheld computer comprising a
stylus-receiving cavity, and a hinge adapted to be removably and pivotally attached
along one side thereof to said keyboard body and adapted to be removably and
15 pivotally attached along the opposite side thereof to said removable attachment
means.

48. The folding keyboard of claim 21 wherein said first and second halves
of said keyboard are hingedly connected by a hinge element having a transverse spline
20 piece and hinging plates extending generally perpendicularly from each end of said
spline piece, wherein each hinging plate has first and second hinge pins which rotate
in said first and second halves respectively.

49. The folding keyboard of claim 48 wherein said spline piece is curved
25 outwardly to receive extending portions of keys when said keyboard is folded.

- 21 -

49. The folding keyboard of claim 48 wherein said first and second halves have respective meshed gear elements which rotate in unison when said keyboard is folded.